## CLAIMS

1. A peptide of the formula

X-D-Phe-Gln-R1-R2-Val-R3-His-R4-$NH_2$

wherein X is acetyl or straight, branched or cyclic alkanoyl group from 3-16 carbon atoms, or X is deleted

R1 is Trp or D-Trp,

R2 is Ala, Aib or Deg,

R3 is Gly, Aib, Deg, Dpg or Ac5c,

R4 is Leu or Ile

or a hydrolyzable carboxy protecting group; wherein at least one of R2 or R3 is an $\alpha,\alpha$- dialkylated amino acid; or a pharmaceutically acceptable salt of the peptide.

2. The peptide of claim 1, wherein X is deleted, R1 is Trp, R2 is Ala, R3 is Aib and R4 is Leu, and said peptide has the formula:

D-Phe-Gln-Trp-Ala-Val-Aib-His-Leu-$NH_2$ (SEQ ID NO: 3)

or a pharmaceutically acceptable salt thereof.

3. The peptide of claim 1, wherein X is deleted, R1 is Trp, R2 is Aib, R3 is Gly and R4 is Leu, and said peptide has the formula:

D-Phe-Gln-Trp-Aib-Val-Gly-His-Leu-$NH_2$ (SEQ ID NO: 4)

or a pharmaceutically acceptable salt thereof.

4. The peptide of claim 1, wherein X is deleted, R1 is D-Trp, R2 is Ala, R3 is Aib and R4 is Leu, and said peptide has the formula:

D-Phe-Gln-D-Trp-Ala-Val-Aib-His-Leu-$NH_2$ (SEQ ID NO:5)

or a pharmaceutically acceptable salt thereof.

5. The peptide of claim 1, wherein X is deleted, R1 is Trp, R2 is Aib, R3 is Gly and R4 is Ile, and said peptide has the formula:

D-Phe-Gln-Trp-Aib-Val-Gly-His-Ile-$NH_2$ (SEQ ID NO: 6)

or a pharmaceutically acceptable salt thereof.

6. The peptide of claim 1, wherein X is deleted, R1 is Trp, R2 is Ala, R3 is Aib and R4 is Ile, and said peptide has the formula:

D-Phe-Gln-Trp-Ala-Val-Aib-His-Ile-$NH_2$ (SEQ ID NO:7)

or a pharmaceutically acceptable salt thereof.

7. The peptide of claim 1, wherein X is deleted, R1 is D-Trp, R2 is Ala,

R3 is Dpg and R4 is Leu, and said peptide has the formula:

D-Phe-Gln-D-Trp-Ala-Val-Dpg-His-Leu-$NH_2$ (SEQ ID NO:8)

or a pharmaceutically acceptable salt thereof.

8. The peptide of claim 1, wherein X is deleted, R1 is Trp, R2 is Deg, R3 is Gly and R4 is Leu, and said peptide has the formula:

D-Phe-Gln-Trp-Deg-Val-Gly-His-Leu-$NH_2$ (SEQ ID NO:9)

or a pharmaceutically acceptable salt thereof.

9. The peptide of claim 1, wherein X deleted, R1 is Trp, R2 is Ala, R3 is Ac5c and R4 is Leu, and said peptide has the formula:

D-Phe-Gln-Trp-Ala-Val-Ac5c-His-Leu-$NH_2$ (SEQ ID NO: 10)

or a pharmaceutically acceptable salt thereof.

10. The peptide of claim 1, wherein X is butanoyl, R1 is Trp, R2 is Ala, R3 is Alb and R4 is Leu, and said peptide has the formula:

Butanoyl-D-Phe-Gln-Trp-Ala-Val-Aib-His-Leu-$NH_2$ (SEQ ID NO: 11)

or a pharmaceutically acceptable salt thereof.

11. The peptide of claim 1, wherein X is octanoyl, R1 is Trp, R2 is Ala, R3 is Alb and R4 is Leu and said peptide has the formula:

Octanoyl-D-Phe-Gln-Trp-Ala-Val-Aib-His-Leu-$NH_2$ (SEQ ID NO: 12)

or a pharmaceutically acceptable salt thereof.

12. A composition comprising an effective amount of a polypeptide according to claim 1, and a pharmaceutically acceptable carrier.

13. A method of treatment of cancer in mammals which comprises the administration of an effective amount of a peptide according to claim 1.

14. A method according to claim 11, further comprising administering a chemotherapeutic compound.

15. A solid phase synthesis process for the preparation of a peptide analog of formula (I):

X-D-Phe-Gln-R1-R2-Val-R3-His-R4-$NH_2$

wherein X is acetyl or straight, branched or cyclic alkanoyl group from 3-16 carbon atoms, or X is deleted,

R1 is Trp or D-Trp,

R2 is Ala, Aib or Deg,

R3 is Gly, Aib, Deg, Dpg or Ac5c,

R4 is Leu or Ile

which comprises sequentially loading protected α,α-dialkylated amino acids in sequential cycles to the amino terminus of a solid phase resin, coupling the amino acids to assemble a peptide-resin assembly, removing the protecting groups and cleaving the peptide from the resin to obtain a peptide.

16. The process as claimed in claim 13, wherein said α-, α-dialkylated amino acids are protected at their α-amino groups by a 9-fluorenyl methoxy carbonyl (Fmoc) group.

17. The process as claimed in claim 15, wherein the coupling is carried out in the presence of activated agents selected from the group consisting of DCC, DIPCDI, DIEA, BOP, PyBOP, HBTU, TBTU, and HOBt.

18. The process as claimed in claim 15, wherein the coupling is carried out in the presence of a solvent selected from the group consisting of DMF, DCM, and NMP or a mixture thereof.

19. The process as claimed in claim 15, wherein said peptide is cleaved from said peptide-resin assembly by treatment with trifluoroacetic acid, crystalline phenol, ethanedithiol, thioanisole and water for 1.5 to 5 hours at room temperature.

20. The process as claimed in claim 15, wherein the α, α-dialkylated amino acid is prepared by conversion of a ketone to a hydantoin and hydrolysis of said hydantoin.